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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,886	08/20/2003	Toshio Kayao	2003_1176A	4644
513	7590	01/05/2006	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			SCHINDLER, DAVID M	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			2862	

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/643,886	KAYAO, TOSHIO	
	Examiner	Art Unit	
	David Schindler	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-11 is/are rejected.
- 7) ☒ Claim(s) 12-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All
 - b) ☐ Some
 - c) ☐ None of:
 - 1. ☒ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the communication received 9/22/2005.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuki et al. (herein referred to as "Ohtsuki") (6,692,153) in view of Nagase (5,947,611).

As to Claim 4,

Ohtsuki discloses a magnetic ring (14) circumferentially magnetized with alternate S poles and N poles ((Column 18, Lines 26-27)) and (Column 6, Lines 62-64) and (Figure 2)), a reinforcing ring (11) fixed to the magnetic ring ((Figure 16) and

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(Column 18, Lines 26-27)), and a non-magnetic protective cover (18) covering the magnetic ring and crimped to the reinforcing ring (Column 18, Lines 23-41) (Figure 16).

Ohtsuki does not disclose the use of welding instead of crimping.

Nagase discloses that welding, bending, or crimping can all be used for mounting (Column 8, Lines 3-5).

It would have been obvious to a person of ordinary skill in the art to modify Ohtsuki to include the use of welding instead of crimping given the above disclosure and teaching of Nagase in order to securely and permanently attach the protective cover to the reinforcing ring.

As to Claim 5,

Ohtsuki in view of Nagase does not explicitly disclose the non-magnetic protective cover is welded to the reinforcing ring via one of (i) welds positioned along an inner circumference of the non-magnetic protective cover, (ii) welds positioned along an outer circumference of the non-magnetic protective cover, and (iii) welds positioned along an inner circumference of the non-magnetic protective cover, and welds positioned along an outer circumference of the non-magnetic protective cover.

However, given the combination disclosed in the rejection of Claim 4, it would have been obvious to a person of ordinary skill in the art to use welds positioned along an inner circumferences of the non-magnetic protective cover as it would have been obvious to a person of ordinary skill in the art to weld the two components together at the point where the non-magnetic protective cover is in contact with the reinforcing ring due to the non-magnetic protective cover being crimped to the reinforcing ring. The

motivation to do so would have been in order to securely and permanently attach the protective cover to the reinforcing ring.

5. Claims 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuki et al. (herein referred to as "Ohtsuki") (6,692,153) in view of Nagase (5,947,611) and in further view of Ono et al. (Positioning system with laser for automatic micro spot laser welding).

As to Claim 6,

Ohtsuki in view of Nagase does not disclose the welds include micro-spot welds produced by a laser.

Ono et al. discloses micro-spot YAG laser welding (Abstract, Lines 1-3).

It would have been obvious at the time of the invention to modify Ohtsuki in view of Nagase to include the welds include micro-spot welds produced by a laser given the above disclosure and teaching of Ono et al. in order to have mass production of high quality electric devices (Abstract, Last two lines).

As to Claim 8,

Ohtsuki in view of Nagase does the welds include welds produced by a YAG laser.

Ono et al. discloses micro-spot YAG laser welding (Abstract, Lines 1-3).

It would have been obvious to a person of ordinary skill in the art to modify Ohtsuki in view of Nagase to include the welds include welds produced by a YAG laser

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given the above disclosure and teaching of Ono et al. in order to have mass production of high quality electric devices (Abstract, Last two lines).

As to Claims 9,

Ohtsuki in view of Nagase does not disclose the non-magnetic protective cover is welded to the reinforcing ring via micro-spot welds produced by a laser.

Ono et al. discloses micro-spot YAG laser welding (Abstract, Lines 1-3).

It would have been obvious at the time of the invention to modify Ohtsuki in view of Nagase to include micro-spot welds produced by a laser as taught by Ono et al. in order to have mass production of high quality electric devices (Abstract, Last two lines).

As to Claims 7 and 10,

Ohtsuki in view of Nagase does not disclose the micro-spot welds produced by a laser include micro-spot welds produced by a YAG laser.

Ono et al. discloses micro-spot YAG laser welding (Abstract, Lines 1-3).

It would have been obvious at the time of the invention to modify Ohtsuki in view of Nagase to include the micro-spot welds produced by a laser include micro-spot welds produced by a YAG laser given the above disclosure and teaching of Ono et al. in order to have mass production of high quality electric devices (Abstract, Last two lines).

As to Claim 11,

Ohtsuki in view of Nagase does not disclose the non-magnetic protective cover is welded to the reinforcing ring by using a YAG laser.

Ono et al. discloses micro-spot YAG laser welding (Abstract, Lines 1-3).

It would have been obvious to a person of ordinary skill in the art to modify Ohtsuki in view of Nagase to include the non-magnetic protective cover is welded to the reinforcing ring by using a YAG laser given the above disclosure and teaching of Ono et al. in order to have mass production of high quality electric devices (Abstract, Last two lines).

Allowable Subject Matter

6. Upon further consideration, the allowability of Claim 5 has been withdrawn.

Please see the above claim rejection of Claim 5 regarding this matter.

7. Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an examiner's statement of reasons for allowance:

As to Claim 12,

The primary reason for the allowance of claim 12 is the inclusion of (i) a weld extending along an entire inner circumference of the non-magnetic protective cover, (ii) a weld extending along an entire outer circumference of the non-magnetic protective cover, and (iii) a weld extending along an entire inner circumference of the non-magnetic protective cover and a weld extending along an entire outer circumference of the non-magnetic protective cover. It is these features found in the claim, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

9. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

10. The Examiner acknowledges Applicant's statement that the subject matter of the Ichiman publication and the current application were, at the time the invention was made, commonly assigned to Uchiyama Manufacturing Corp (Remarks, Page 1, Lines 5-9).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Schindler whose telephone number is (571) 272-2112. The examiner can normally be reached on M-F (8:00 - 5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David Schindler
Examiner
Art Unit 2862

DS


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